

(10 points) Answer both of the following essay questions (write only on the paper provided):

- Carefully define demand for a good such as oranges. Show using indifference curve analysis (graphs) how the demand for oranges is derived. Briefly explain your answer and the graphs that you use.

Demand shows how much a consumer is willing and able to buy given the price, *ceteris paribus*.

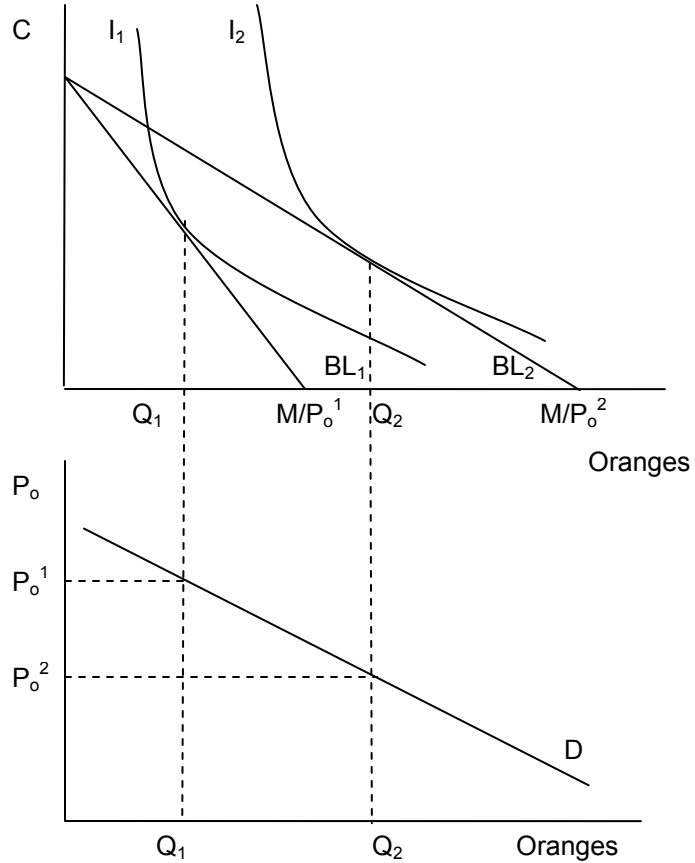
The graph to the right illustrates how a demand curve is derived. The upper graph shows the indifference curve analysis.

Suppose that the price of oranges equals P_o^1 initially. In this case, the budget line equals BL_1 (notice that the intercept on the oranges axis is defined by this price).

On BL_1 , the consumer maximizes his/her utility by consuming Q_1 oranges.

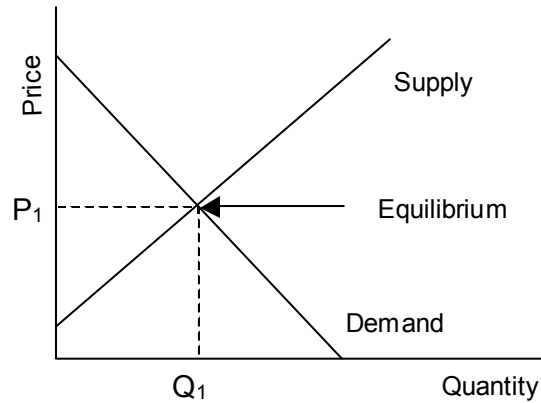
Now suppose that the price of oranges falls to P_o^2 . The budget line rotates out because of the lower price to BL_2 and the consumer maximizes utility by increase the quantity consumed of oranges to Q_2 .

The demand curve is derived in the lower graph which simply shows the price and quantity demanded together. We have two price, Q_D pairs: P_o^1, Q_1 and P_o^2, Q_2 . Drawing a line through these two points gives the derived demand curve as shown.



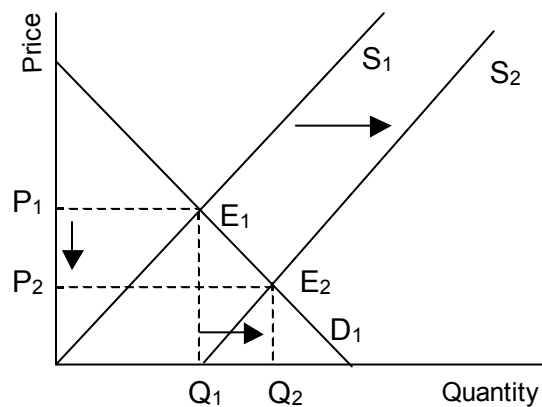
2. Draw a graph showing equilibrium in the market for fruits and vegetables. Briefly explain the graph. Suppose that wages for fruit and vegetable workers decrease. Use your graph to illustrate the impact of this change upon the equilibrium price and quantity of fruits and vegetables? Briefly explain your answer.

Graph 1 shows the initial equilibrium in the fruit and vegetable market. Notice that Graph 1 contains a standard downward-sloping demand curve and up-ward sloping supply curve, with equilibrium occurring where the two curves cross. That is, equilibrium occurs at a price (P_1) where quantity demanded (Q_1) equals quantity supplied (Q_1).



Graph 1 - Equilibrium in the Fruit/Vegetable Market

Graph 2 illustrates the change in equilibrium as wages for workers producing fruits and vegetables decreases. Lowering wages will also lower the costs of production. However, lowering the costs of production will increase the willingness of firms in the market to supply fruits and vegetables at the same price, shifting the supply curve to the right. (Another way to think of this is consider what would happen to the price the firm must receive to be willing to supply the same quantity as previously – clearly this price would fall with lower costs, again shifting the supply curve right.)



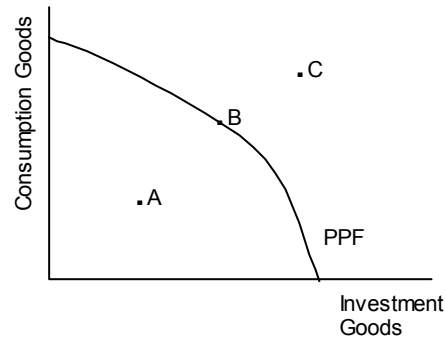
**Graph 2
Increase in Supply**

Thus, in Graph 2 the original supply curve is S_1 , the original equilibrium is E_1 , while the original equilibrium price and quantity in the market is P_1 and Q_1 . The supply curve shifts right to S_2 and the market moves to a new equilibrium E_2 , where prices fall from the original equilibrium (to P_2) and quantity rises to a new level (Q_2).

(15 points) Answer all of the following 15 multiple-choice questions. Make sure that your answers are coded in the answer sheet provided. Correct answers are in bold with an asterisk at the beginning of the answer.

- Which of the following would not cause the demand for passenger cars to increase?
 - *The price of cars decreases.**
 - The price of pickup trucks increases.
 - The price of gasoline decreases.
 - It is expected that the price of cars will increase in the future.
 - All of the above cause the demand for cars to increase.
- If it is observed in a particular market that equilibrium price has increased while equilibrium quantity exchanged has decreased it is likely that:
 - supply has increased while demand is constant.
 - *supply has decreased while demand is constant .**
 - demand has increased while supply is constant.
 - demand has decreased while supply is constant.
- Technological inefficiency occurs when:
 - it is impossible to make someone better off without making someone else suffer.
 - it is possible to make someone better off without making someone else suffer.
 - the maximum output is being produced given the resources available.
 - *the maximum output is not being produced given the resources available.**
- When a market is in equilibrium:
 - demand equals supply.
 - demand is greater than supply.
 - quantity demanded is less than quantity supplied.
 - *quantity demanded equals quantity supplied.**
 - firms are making no profits.
- Opportunity cost equals:
 - The value of all foregone alternatives when a choice is made.
 - The value of the least valued alternative when a choice is made.
 - *The value of the next best alternative when a choice is made.**
 - The price of the alternative in dollars.

Use the following Graph to Answer Question 6



- Point A on the graph indicates which of the following?
 - *Unemployment or technological inefficiency exists in this economy.**
 - Full employment and technological efficiency exist in this economy.
 - Point A is unattainable with the current level of technology and productive resources.
 - Allocative efficiency exists in this economy.
 - Allocative inefficiency exists in this economy.
- Which of the following statements about production possibility frontiers are true?
 - Scarcity implies downward sloping production possibility frontiers.
 - An increase in the availability of resources or a decrease in technology will cause an increase in the production possibility frontier.
 - both statements are true.
 - both statements are false.
 - *I is true while II is false.**
 - I is false while II is true.
- Price elasticity of demand measures:
 - the extent to which quantity demanded will change when there is a change in quantity supplied.
 - the extent to which quantity demanded is influenced by input prices.
 - the relationship between the current market price and the equilibrium price of a good.
 - *the responsiveness of quantity demanded to changes in the good's own price.**
- The marginal rate of substitution measures:
 - The price a consumer pay s for one good relative to a second good.
 - *The rate at which a consumer would be willing to trade one good for another.**
 - The extra utility a consumer gains by consuming additional units of a good.
 - The marginal product of labor.

10. Which of the following is a positive statement?
- an unemployment rate of 7 percent is a national disgrace.
 - unemployment is not as important a problem as inflation.
 - *when the national unemployment rate is 7 percent, the unemployment rate for inner-city youth is often close to 40 percent.**
 - inflation rates should never be allowed to climb above 14 percent.
11. Economists assume that for most consumers indifference curves are convex, which means that:
- Indifference curves are bowed out from the origin.
 - Indifference curves are downward sloping lines.
 - *Consumers tend to prefer medium amounts of all goods they consume rather than just consuming a little of one and a lot of another good.**
 - Consumers tend to prefer consuming a little of one good and a lot of another good rather than consuming medium amounts of both goods.
12. Marginal Utility is a measure:
- of the total utility derived from consuming marginally beneficial goods.
 - *of the additional utility derived through the consumption of an additional unit of a good.**
 - computed by dividing total utility by the number of units of a good consumed.
 - determined strictly by interactions of supply and demand.
13. If the price of luxury yachts rises from \$500,000 to \$600,000 and causes annual sales to drop from 30,000 to 10,000, then the price elasticity of demand equals:
- 11
 - 2.75
 - *5.50**
 - 13.75
 - .19
14. Which of the following statements about budget lines are true?
- Budget lines reflect a consumer's preferences.
 - If a consumer's income rises then the consumer's budget line will move out parallel to his original budget line.
- both statements are true.
 - both statements are false.
 - I is true while II is false.
 - *I is false while II is true.**
15. Suppose the price of wheat increases. What will happen to the supply of corn assuming that corn and wheat are substitutes in production?
- supply will increase.
 - *supply will decrease.**
 - quantity supplied will increase.
 - quantity supplied will decrease.